ABSTRACT

A vehicle-mounted communication device and a road-to-vehicle communication device are provided which each allow communication of information using a simple structure by making leakage of information difficult. Information including encryption information is communicated between an on-road apparatus 10 having a memory 28 in which an electronic key A is stored, and a vehicle-mounted apparatus 30 having a storage circuit 48. Encrypted route information and the like are stored as is in the vehicle-mounted apparatus 30. Encryption and decoding are executed at an on-road apparatus side. In reception of charges, encrypted information from an IC card 62 having a memory 70 in which a security mechanism is stored passes through the vehicle-mounted apparatus and is transferred to the on-road apparatus. The encrypted information from the IC card 62 is decoded with the on-road apparatus. Accordingly, the encrypted information is mutually transferred between these apparatuses and the vehicle-mounted apparatus does not require encryption or decoding. As a result, the security of a system can be improved.